

State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICE FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Waste Management Division
103 South Main Street / West Building
Waterbury, Vermont 05671-0404
802-241-3888
FAX 802-241-3296

March 18, 1997

THOMAS MCCAFFREY
26 WESTERN AVE
ST JOHNSBURY SCHOOL DISTRICT
ST JOHNSBURY VT 05819

RE: Sites Management Activity Completed at the St. Johnsbury Middle School St. Johnsbury (Site #96-2032)

Dear Mr. McCaffrey:

The Sites Management Section (SMS) has reviewed a site investigation report by Griffin International, dated January 1997 for the above referenced site. With the information presented in this report, the SMS has the following understanding about the petroleum contamination at the St. Johnsbury Middle School:

- Soil contamination was found during the removal of a 2,000-gallon gasoline underground storage tank (UST) on July 8, 1996. Photoionization detector (PID) readings ranged from 200 parts per million (ppm) to 300 ppm.
- On November 18, 1996, four soil borings (SB-1, SB-2, SB-3, SB-4) were placed onsite, ranging in depth from about 33 feet to 39 feet. Soil boring SB-1 was drilled within the former UST location; SB-2 and SB-3 were placed near the edge of a terrace that slopes toward the Sleepers River; and SB-4 was located north of the former UST location and served as the upgradient boring. The soil borings were advanced until there was refusal, which was inferred as bedrock. The subsurface consisted generally of fine to medium sands from the ground surface to a depth of 10 feet; silty and sandy clay interbedded with sand between depths of 10 feet and 15 feet; silts between the depth interval of 15 feet and 20 feet; and fine sand for the remaining depth of the borings. Groundwater was detected in SB-1 and SB-4 between 36 feet and 37 feet. Because groundwater was not found in SB-2 and SB-3, the overburden aquifer appears discontinuous as well as thin (less than two feet thick). If groundwater was continuous, flow would likely move west toward the Sleepers River and away from the school building.
- PID readings of drill cutting samples ranged from about 3 ppm to 300 ppm. PID readings at the bottom of SB-1, SB-2, SB-3, and SB-4 were 200 ppm, 30 ppm, 16 ppm, and 56 ppm, respectively.
- Soil samples were collected from the last split-spoon samples before refusal in SB-2 and
 SB-3 and just above the water table in SB-1 and SB-4. Samples were analyzed using

T. McCaffrey March 17, 1997 Page 2

EPA Method 8020. No petroleum contaminants were found above detection limits in SB-2 and SB-3. Small concentrations of xylenes were detected in the soil samples SB-1 and SB-4, but the concentrations were below the EPA risk-based concentrations.

• No unacceptable risk to human health and the environment is present due to any residual contamination remaining in the ground from the removal of the USTs. The area is served by municipal water. The closest potential sensitive receptors from the contamination are the onsite school building, located about 100 feet to the north, and the Sleepers River, located 600 feet to the south. However, these potential receptors are unlikely to be impacted by onsite contamination because the contamination appears to be confined to the subsurface directly beneath the UST area.

Based on the above, the SMS is assigning this site a Site Management Activity Completed (SMAC) designation. This SMAC designation does not release the St. Johnsbury School District of any past or future liability associated with the petroleum contamination remaining in the ground from the removed UST. It does, however, mean that the SMS is not requesting any additional work at this time.

If you have any questions or comments, please contact me at (802) 241-3888.

Sincerel

George Desch, Chief, P.E.

Sites Management Section

cc:

St. Johnsbury Selectboard

DEC Regional Office

Mr. Timothy J. Kelly, Griffin International

JS:wp51/sites/962032/sims1.ltr